

## **TYPHOON CECIL (04W)**

The second of two typhoons during the month of May, Cecil developed in the South China Sea in the wake of Typhoon Brenda (03W).

On 20 May, an extensive monsoon trough spread across the Bay of Bengal into the South China Sea where it terminated in Typhoon Brenda (03W). As Brenda moved northwestward and dissipated over southern China, it left behind an area of enhanced lowlevel southwesterly flow. Additionally, the dissipation of Brenda (03W) reduced the vertical wind shear from the north over the genesis area for Cecil. Cecil was first detected on 21 May as a low-level cyclonic circulation associated with the enhanced southwesterly flow. The Significant Tropical Weather Advisory was reissued at 212000Z to cover this circulation and its persistent cloudiness. When surface synoptic reports and additional satellite data indicated that the system was becoming better organized, a Tropical Cyclone Formation Alert was issued at 220230Z.

Initially, the deep convection was only located in the southern semicircle, but on 22 May the convection wrapped around the circulation center. This event, along with falling central pressures precipitated the first

warning on Tropical Depression 04W at 221800Z. The warning was then amended based on subsequent synoptic reports, and the system upgraded to a tropical storm.

At the start, Cecil was forecast to track northward through the weakness in the subtropical ridge created by Brenda (03W). This forecast was supported by guidance from the dynamic aid, OTCM, and HPAC, an aid which blends one half persistence with one half climatology. But, the tropical cyclone turned towards the west on 23 May and tracked into central Vietnam in response to ridging to the north over China.

With inflow from the extensive low-level southwest monsoonal flow, divergence aloft and weak vertical wind shear, Cecil reached typhoon intensity at 240000Z (Figure 3-04-1). The typhoon tracked across the coast of Vietnam at 241800Z with maximum sustained surface winds estimated at 70 kt (35 m/sec). News agencies reported that at least 52 people perished, 37 were injured, over 100,000 were left homeless and 700 water craft were destroyed. Persistent convection associated with Cecil produced heavy rains inland which resulted in flooding and crop damage in Laos and northeastern Thailand.

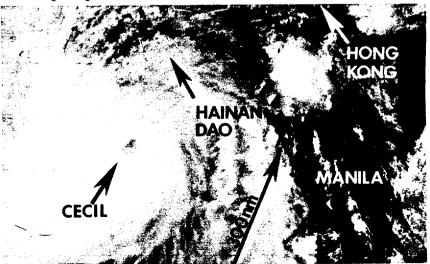


Figure 3-04-1. Cecil with a large ragged 40 nm (75 km) diameter eye approaches the coast of Vietnam (240539Z May NOAA visual imagery.)